

CLAIMS

What is claimed is:

- 1        1. A fastener for attaching a circuit board to a  
2 chassis comprising:
  - 3              a head section for engaging the circuit board;
  - 4              a tail section for engaging the chassis; and
  - 5              a spring section to urge the head into engagement  
6 with the circuit board.
- 1        2. The fastener of claim 1, wherein the head section  
2 the tail section and the spring section are included in one  
3 piece.
- 1        3. The fastener of claim 1, wherein the tail section  
2 includes a fulcrum in pivotal engagement with the chassis.
- 1        4. The fastener of claim 1, further comprising a  
2 grounding arm.
- 1        5. The fastener of claim 4, wherein the grounding  
2 arm further comprises a foot that electrically contacts the  
3 chassis.
- 1        6. The fastener of claim 1, further comprising a  
2 fastener stop to hold the fastener generally upright when  
3 the fastener is disengaged from the circuit board.

1        7. The fastener of claim 1, wherein the fastener  
2 comprises die-stamped steel.

1        8. The fastener of claim 1, wherein the fastener  
2 comprises plastic.

1        9. The fastener of claim 1, wherein the fastener  
2 electrically connects the circuit board to the chassis.

1       10. A method for attaching a circuit board to a  
2 chassis comprising the steps of:

3              positioning one or more pivoting fasteners within  
4 the chassis, the one or more pivoting fasteners having  
5 a head section, a tail section, and a spring section;

6              connecting the tail section of the one or more  
7 pivoting fasteners to the chassis;

8              engaging one or more circuit board mounting holes  
9 with the head section of the one or more pivoting  
10 fasteners; and

11             locking releasably the circuit board to the  
12 chassis.

1       11. The method of claim 10, wherein the step of  
2 releasably locking the circuit board to the chassis is  
3 accomplished using a retainer.

1       12. The method of claim 10, further comprising the  
2 step of electrically connecting the circuit board to the  
3 chassis.

1       13. The method of claim 10, wherein the pivoting  
2 fastener electrically connects the circuit board to the  
3 chassis.

1        14. The method of claim 10, wherein the head section  
2        the tail section and the spring section of the one or more  
3        pivoting fastener are included in one piece.

1       15. A system for attaching a circuit board to a  
2 chassis comprising:

3                 one or more pivoting fasteners connected to the  
4 chassis; and

5                 a retainer to engage the circuit board.

1       16. The system of claim 15, wherein the one or more  
2 pivoting fasteners are aligned to mounting holes in the  
3 circuit board.

1       17. The system of claim 15, wherein the one or more  
2 pivoting fasteners are die-stamped steel.

1       18. The system of claim 15, wherein the one or more  
2 pivoting fasteners are formed of substantially different  
3 materials.

1       19. The system of claim 15, wherein the retainer is  
2 configured to work in combination with the one or more  
3 pivoting fasteners to releasably hold the circuit board.

1       20. The system of claim 15, wherein the one or more  
2 pivoting fasteners electrically connect the chassis to the  
3 circuit board.